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LENGTHENING LIFE

Through Insurance Health Work

A Study of the
*Trends of Mortality
Among Policy-holders*

in the

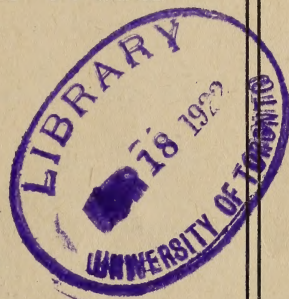
Metropolitan Life Insurance Company
Industrial Department

and in

United States Registration Area

1911 to 1920

METROPOLITAN LIFE INSURANCE COMPANY
New York
1922



Foreword.

In 1909, the Metropolitan Life Insurance Company began a systematic campaign to lengthen the lives of its industrial policy-holders. The mortality in this group has, in general, been higher than in the general population. This has been due to the economic and industrial conditions under which industrial policy-holders live and work.

The Company's campaign to prolong life has followed four main lines:

1. Education of policy-holders in personal hygiene by distribution of specially prepared booklets and pamphlets to teach them the fundamentals of health and the prevention of disease. The total distribution to January 1, 1922, was 238,877,506 pamphlets.
2. Organization of a Visiting Nurse Service to care for policy-holders when ill, and incidentally to teach sanitation and hygiene. To December 1, 1921, a total of 13,802,906 visits were made.
3. Development of an Industrial Service Bureau to cooperate with employers of labor in securing better working and living conditions for their work people.
4. Cooperation with Health and other Officials of States and Cities to secure adequate legislation and appropriations for the conduct of constructive and progressive health work.

Incidentally, the Company has prepared exhibits, made sickness and sanitary surveys, carried on "clean-up" and baby welfare campaigns, and has attempted to supplement the activities of social and civic agencies in the improvement of health in their respective communities.

The results of the Company's efforts are highly gratifying. As shown in the attached charts, its mortality experience has consistently improved, and the improvement has been much greater than in the Registration Area of the United States.

Measured in terms of lives, the improvement in Industrial mortality in 1921, over 1911, means a saving of 55,000 lives; measured in terms of dollars and cents, it means a saving of \$11,537,820 in death claims.

The Registration Area mortality record for 1921 is not available as yet. The improvement of the Company's mortality in 1920 over 1911, in excess of the improvement in the Registration Area at the comparable ages, one to seventy-four, for the same years, means a saving of 23,910 lives and \$4,734,180 in death claims.

Good health pays!

Halcy Fiske
President

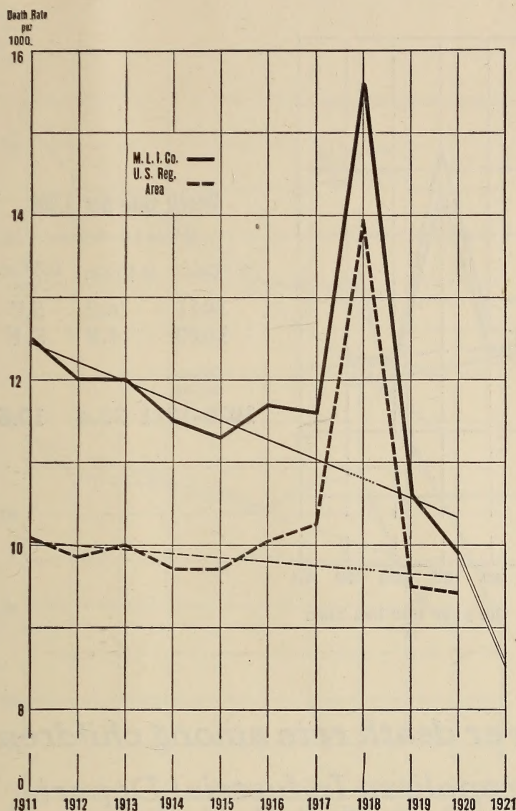
Technical Note.

The following charts show the decline in mortality between 1911 and 1920 among Industrial policy-holders of the Metropolitan Life Insurance Company and in the United States Registration Area at ages one to seventy-four years. Comparison of the data for the insured group with those for the Registration Area at ages one to seventy-four was made because no infants under one year of age and very few persons above seventy-four years are to be found in the insurance experience. The percentage of decline in the death rates, 1911 to 1920, has been in virtually every case greater among policy-holders than in the general population. The decline for 1921 in the Metropolitan experience is also shown. Similar data for the United States Registration Area in that year are not yet available.

This comparison of the percentages of decline in the mortality rates of these two groups takes into consideration the figures for the two extreme years of the decade only. These rates of single calendar years are subject, however, to chance and other variations. The decline between them is, therefore, not the best indication of what has happened during the intervening period.

To overcome this difficulty, straight trend lines have been added to the charts. These lines indicate the general tendency of the death rate in each group throughout the ten-year period. They show strikingly the more rapid decline in the death rate among policy-holders than in the general population. In every case, the downward slope of the trend lines is steeper for the insured group than for the population of the Registration Area.

All Causes of Death



Death rate per 1,000

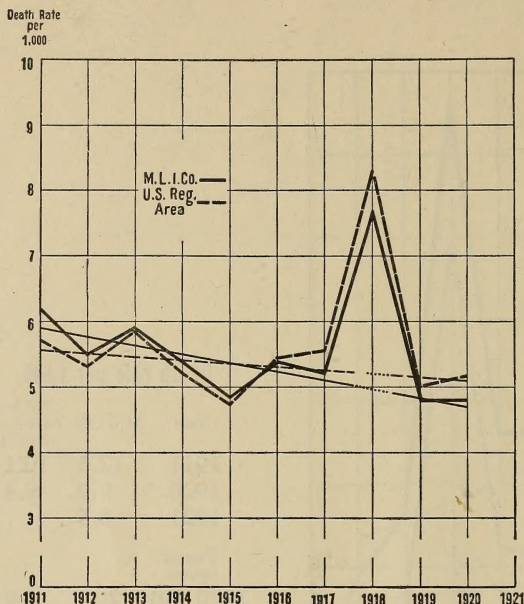
Year	M.L.I. Co.	U.S. Reg. Area-Ages 1 to 74
1911	12.5	10.1
1920	9.9	9.4
1921	8.5	....
Percent decline:		
1920-1911	20.8	6.9
1921-1911	31.9	....

In trending these death rates, the year 1918 has been omitted. This was done to eliminate the effect of the influenza epidemic. With the year 1918 included, there would have been an apparent upward trend for the decade in both experiences.

55,000 fewer deaths during 1921 than if 1911 mortality rate had prevailed.

The downward tendency in the mortality among Metropolitan Industrial policy-holders is nearly five times that of the population of the United States Registration Area.

Mortality of Children



Death rate per 1,000
at ages 1 to 14 years

Year	M.L.I.Co.	U.S.Reg. Area
1911	6.2	5.7
1920	4.8	5.1

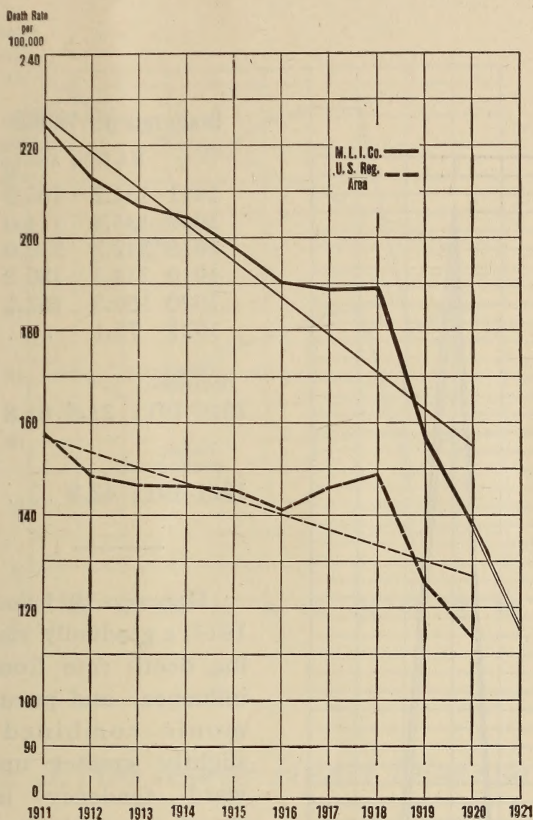
Percent.
decline:
1920-1911 22.6 10.5

In trending these death rates, the year 1918 has been omitted.

Since 1916, a lower death rate among children insured in Metropolitan Industrial Department than among children in United States Registration Area.

Downward tendency of mortality of insured children two and one-half times that among children in general population of United States Registration Area.

Tuberculosis--All Forms



Death rate per 100,000

Year	M.L.I. Co.	U.S. Reg. Area-Ages 1 to 74
1911	224.6	157.6
1920	137.9	113.6
1921	115.1	113.6

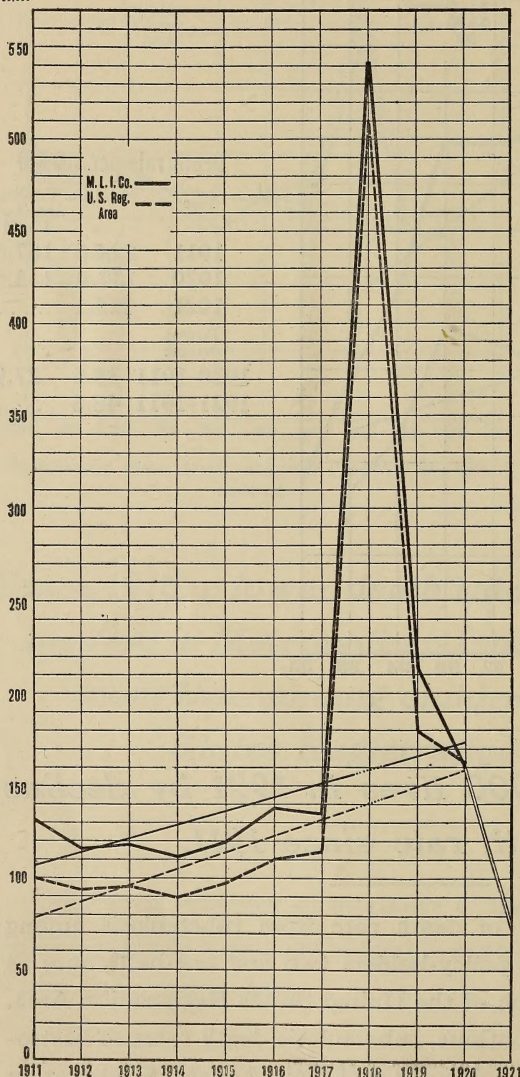
Percent. decline:	1920-1911	1921-1911
	38.6	48.8
	27.9	48.8

A saving of 15,000 lives in 1921 by decline in death rate since 1911.

Downward tendency of death rate from tuberculosis among Metropolitan Industrial policy-holders two and one-half times as great as in the population of the United States Registration Area. Should rate of decline continue, tuberculosis death rates of Metropolitan Industrial policy-holders and of United States Registration Area will coincide in 1926.

Influenza and Pneumonia

Death Rate
per
100,000



In trending these death rates, the year 1918 has been omitted.

Death rate per 100,000

Year	M. I. I. Co.	U. S. Reg. Area-Ages 1 to 74
1911	131.2	100.2
1917	135.4	114.0
1918	542.2	510.0
1919	214.1	180.0
1920	159.5	162.1
1921	75.1	....

Percent.
increase:

1920-1911 21.6 61.8

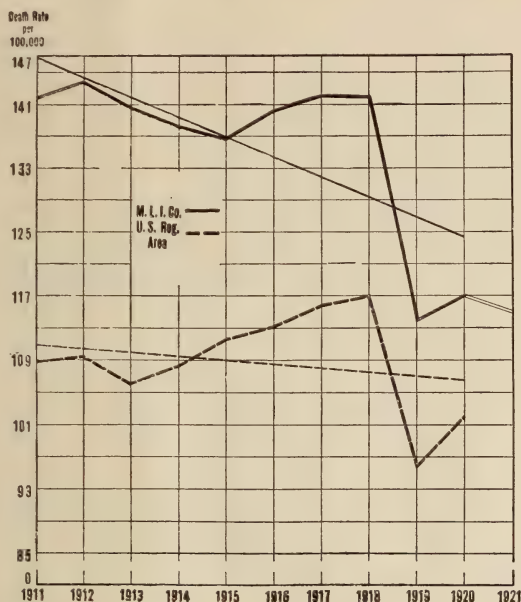
Percent.
decline:

1921-1911 42.8

Between 1911 and 1917, a gradually rising death rate from influenza and pneumonia combined; slightly greater upward tendency in population of United States Registration Area than among Metropolitan Industrial policy-holders.

7,700 fewer deaths in 1921 than if 1911 death rate had prevailed.

Diseases of the Heart



Death rate per 100,000

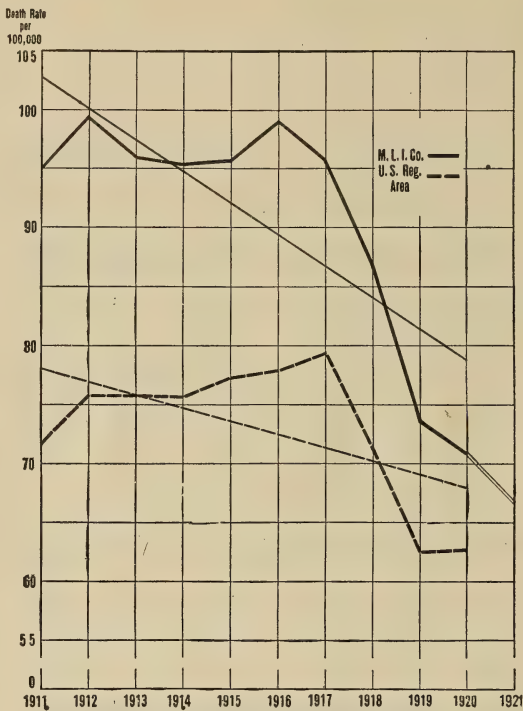
Year	M.L.I. Co.	U.S. Reg. Area-Ages 1 to 74
1911	141.8	108.7
1920	117.0	101.9
1921	115.0	....

Percent. decline:		
1920-1911	17.5	6.3
1921-1911	18.9	....

*3,700 fewer Heart Disease deaths among
Metropolitan Industrial policy-holders
than if 1911 death rate had prevailed.*

More rapidly declining heart disease death rate among Metropolitan Industrial policy-holders than in United States Registration Area.

Chronic Nephritis



Death rate per 100,000

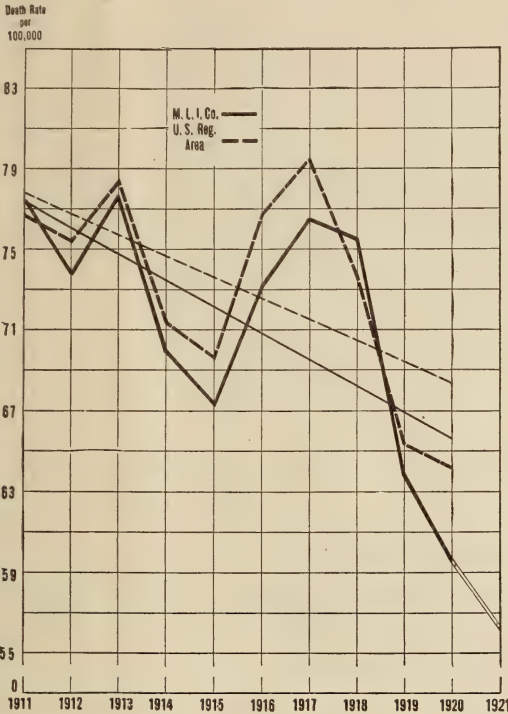
Year	M.L.I.Co.	U.S.Reg. Area-Ages 1 to 74
1911	95.0	71.8
1920	70.8	62.6
1921	66.7	....

Percent. decline:		
1920-1911	25.5	12.8
1921-1911	29.8	....

3,900 fewer Chronic Nephritis deaths among Metropolitan Industrial policy-holders during 1921 than if 1911 death rate had prevailed.

More than twice the tendency toward decline among Metropolitan Industrial policy-holders than in United States Registration Area.

Accidents



Death rate per 100,000

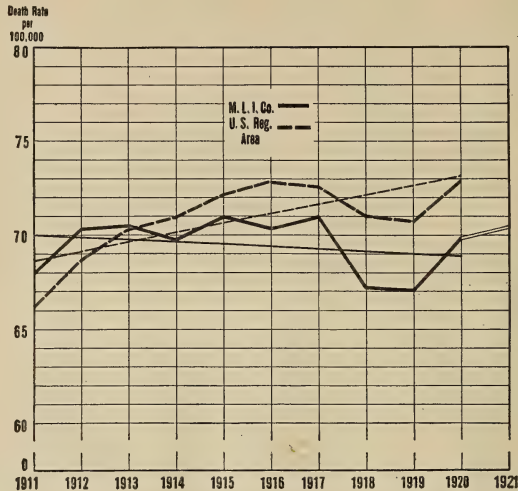
Year	M.L.I.Co.	U.S.Reg. Area-Ages 1 to 74
1911	77.4	76.7
1920	59.6	64.1
1921	56.2	....

Percent. decline:		
1920-1911	23.0	16.4
1921-1911	27.4	....

2,900 fewer fatal accidents among Metropolitan Industrial policy-holders than if 1911 death rate had prevailed.

A slightly greater downward trend among Metropolitan Industrial policy-holders than in population of United States Registration Area.

Cancer

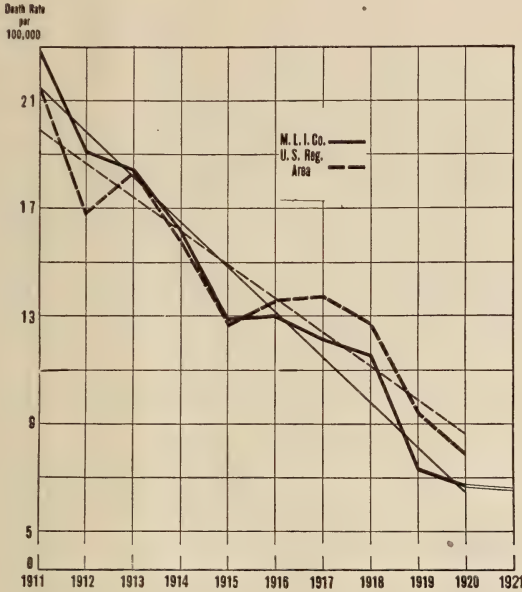


Death rate per 100,000

Year	M.L.I.Co.	U.S.Reg. Area-Ages 1 to 74
1911	68.0	66.2
1920	69.8	72.8
1921	70.4	....
Percent. increase:		
1920-1911	2.6	10.0
1921-1911	3.5	....

Slightly downward trend among Metropolitan Industrial policy-holders. An upward trend in the population of United States Registration Area.

Typhoid Fever



Death rate per 100,000

Year	M.L.I.Co.	U.S.Reg. Area-Ages 1 to 74
1911	22.8	21.4
1920	6.7	7.9
1921	6.6	....

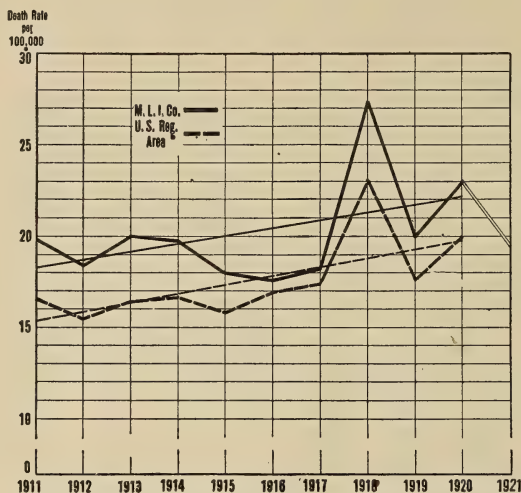
Percent.
decline:

1920-1911	70.6	63.1
1921-1911	71.1	....

*Typhoid fever is a vanishing cause of death.
2,200 fewer deaths among Metropolitan
Industrial policy-holders than if 1911
death rate had prevailed.*

Downward tendency of typhoid fever death rate among Metropolitan Industrial policy-holders one-third greater than in population of United States Registration Area.

All Diseases and Conditions of the Puerperal State



Death rate per 100,000

Year	M.L.I. Co.	U.S. Reg. Area-Ages 1 to 74
1911	19.8	16.6
1920	23.0	19.9
1921	19.5	....

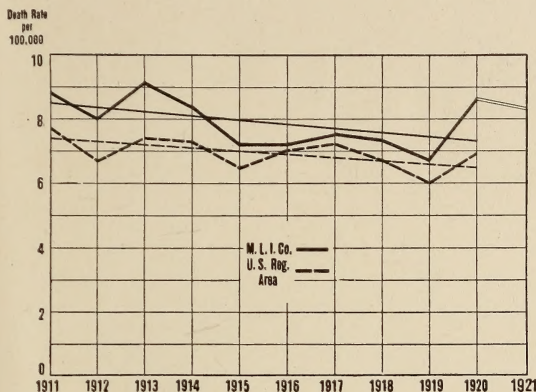
Percent. increase:		
1920-1911	16.2	19.9

Percent. decline:		
1921-1911	1.5	....

*Prior to influenza epidemics of 1918-1920, a
declining death rate among policy-holders;
a rising death rate in United States
Registration Area.*

1921 death rate for policy-holders slightly lower than in 1911;
due to decline in puerperal septicemia and accidents of pregnancy.

Puerperal Septicemia



Death rate per 100,000

Year	M. L. I. Co.	U. S. Reg. Area-Ages 1 to 74
1911	8.8	7.7
1920	8.6	6.9
1921	8.3	....
Percent. decline:		
1920-1911	2.3	10.4
1921-1911	5.7	....

*Downward tendency of the death rate during
the decade greater among Metropolitan
Industrial policy-holders than in United
States Registration Area.*

